

**AMENDMENTS TO THE SPECIFICATION****In the Sequence Listing:**

Please replace the previously filed sequence listing with the substitute sequence listing submitted herewith as an ASCII .txt file in the above-captioned application. A computer readable form of the sequence listing (in ASCII .txt format) electronically filed via EFS-Web accompanies this response. Applicants respectfully request consideration and entry of the substitute sequence listing.

**Please replace the previously inserted new paragraph on page 1, beginning at line 4, immediately following the previously inserted new heading “Reference to Sequence Listing Submitted Via EFS-WEB”, with the following rewritten paragraph:**

**Reference to Sequence Listing Submitted Via EFS-WEB**

The entire content of the following electronic submission of the sequence listing via the USPTO EFS-WEB server, as authorized and set forth in MPEP §1730 II.B.2(a)(C), is incorporated herein by reference in its entirety for all purposes. The sequence listing is identified on the electronically filed text file as follows:

File Name	Date of Creation	Size (bytes)
514572001200Seqlist	<del>April 14, 2008</del> <u>August 13, 2009</u>	<del>36,044</del> <u>36,039</u> bytes

**Please replace the table beginning on page 36, at line 32, ending on page 43, just above Example 5, with the following rewritten table:**

Table 1. The genotyping probes for HLA\_A, B, DRB1 locus

Probe name	HLA_A probes sequences	SEQ ID NO:
PBH_0301001	CCTGCGCTCTTGGACCGC	1
PBH_0301001a	CCTGCGCTCTTGGACCGC	2
PBH_0301001b	CCTCCTGCGCTCTTGGACCG	3
PBH_0301001c	CCTGCGCTCTTGGACC	4
PBH_0301001d	CGTGTCCC GGCCCGC	5
PBH_0301001e	ATGGAGCCGCGGGCGC	6
PBH_0301001g	CCTGCGCTCTTGGACCGCGG	7
PBH_0301001comp	GCGGTCCAAGAGCGCAGG	8
PBH_0301002a	CCTGCGCTTTTGGACCGC	9
PBH_0301002B	CCTGCGCTGTGGACCGC	10
PBH_0301003	GCAGGAGAGGCCGTGAGTATTGG	11
PBH_0301004	CACCATCAGATAATGTATGGCTGC	12
PBH_0301004	CACCATCCAGATAATGTATGGCTGC	13
PBH_0301101	TTCTACACCTCCGTGTCCCG	14
PBH_0301103	CGCTTCATCGCAGTGGGCT	15
PBH_0301105	CGAGCCAGAAGATGGAGCC	16
PBH_0301106	CCGCGGGCACCGTGGATA	17
PBH_0301107	GCAGGAGGGTCCGGAGTATT	18
PBH_0301111	GACGTGGGGCCGGACGGG	19
PBH_0301112	GACGGGCGCCTCCTCCGC	20
PBH_0301114	CGGGTACCACAGTACGCCT	21
PBH_0301115	GGTACCGGCAGGACGCCTA	22
PBH_0301116	CGCCCTGAACGAGGACCTG	23
PBH_0301117	CGGACATGGCAGCTCAGATC	24
PBH_0301119	CCACCAAGCACAAAGTGGGA	25
PBH_0301120	AAGTGGGAGACGGCCCATG	26
PBH_0301121	AGGCGGCCCGTGTGGCGG	27
PBH_0301122	AGGCGGTCCATGCGGCGG	28
PBH_0301123	CGGCCCATGAGGCGGAGC	29
PBH_0301125	TACCTGGATGGCACGTGCG	30
PBH_0301127	CTGGAGGGCGAGTGCCTGG	31
PBH_0301128	TGCGTGGACGGGCTCCGC	32
PBH_0301129	GTATTCTACACCTCCGTGTCCCG	33
PBH_0301130	CGAGCGGTTTGACAGCGAC	34
PBH_0301131	CGTGCGGTTTCGACAGCGAC	35
PBH_0301133	CGTGGGGCCCGGACGGG	36
PBH_0301136	AGGCGGTCCATGCGGCG	37
PBH_0301137	CCCGGCCGCGGGGAGCCC	38

PBH_0301138	CCGCGGGCGCCGTGGATA	39
PBH_0301139	TGGGACGAGGAGACAGGGA	40
PBH_0301140	TGGGACGAGGAGACACGGA	41
PBH_0301141	TGGGGACCCCTGCGCGGCTA	42
PBH_0301142	GACGTGGGGTCCGACGGG	43
PBH_0301143	GACGGGCGCTTCCTCCGC	44
PBH_0301144	GCGGGTACCAAGCAGGACGC	45
PBH_0301145	CGCCCTGAAAGAGGACCTG	46
PBH_0301146	AGCTCAGATCACCAAGCGCA	47
PBH_0301146a	TCAGATCACCAAGCGCAAGAG	48
PBH_0301147	AGCTCAGATCACCGAGCGCA	49
PBH_0301148	GGCTCAGATCACCCAGCGCA	50
PBH_0301148a	TCAGATCACCCAGCGCAAGTG	51
PBH_0301149	AGACGGCCCATGAGGCG	52
PBH_0301149a	AGACGGCCCATGAGGCGG	53
PBH_0301150	GCGGAGCAGCGGAGAGTCT	54
PBH_0301150a	AGACGGCCCATGAGGCGG	55
PBH_0301151	GCGGAGCAGTTGAGAGCCT	56
PBH_0301151a	GGCGGAGCAGTTGAGAGCC	57
PBH_0301152	GCGGAGCAGTGGAGAGCCT	58
PBH_0301153	TACCTGGAGGGCACGTGCG	59
PBH_0301154	TGCGTGGAGTGGCTCCGC	60
PBH_0301155	TCACCGAGTGGACCTGGGG	61
PBH_0301155a	CCGAGTGGACCTGGGGACC	62
PBH_0301156	TGACCGAGAGAACTGCGG	63
PBH_0301156a	CCGAGAGAACTGCGGATCG	64
PBH_0301157	GAAGGCCACTCACAGACTG	65
PBH_0301171	TATTTCTTCACATCCGTGTCCG	66
PBH_0301172	TCTACACTTCCGTTTCCCGGC	67
PBH_0301173	CTACACTCCATGTCCCGGC	68
PBH_0301174	CCGGAACACACGGAAAGTGAA	69
PBH_0301175	ATTGGGACGGGAGACACG	70
PBH_0301176	GACACGGAATATGAAGGCCCA	71
PBH_0301177	GACACGGAATGTGAAGGCC	72
PBH_0301178	TCACAGACTCACCGAGTGGACC	73
PBH_0301179	TCACAGATTGACCGAGTGGACC	74
PBH_0301180	TCACAGACTGACCGAGTGGACC	75
PBH_0301181	CGAGCGAACCTGGGGACC	76
PBH_0301182	CCGAGAGAGCCTGCGGATC	77
PBH_0301183	ACCGAGAGAACCTGGGGACC	78
PBH_0301184	GTGGACCTGGCGACCTGCG	79
PBH_0301185	CACCGTCCAGAGGATGTATGGC	80
PBH_0301186	ACCAGCAGGACGTTACGACG	81

PBH_0301187	TCGCCTTGAACGAGGACCTG	82
PBH_0301188	CCTGCGCTCTTGGACCGC	83
PBH_0301189	TCAGACCACCAAGCACAAAGTGG	84
PBH_0301190	GAGGCGGCCCATGTGGC	85
PBH_0301191	GGCCCATGCGGCGGAGC	86
PBH_0301192	GCGGCCCGTTCGGGCGGA	87
PBH_0301193	GCACGTGCGTGGAGTGGC	88
PBH_0301194	GCCGGTGCCTGGACGGGC	89
PBH_0301195	GGCGAGTGCCTGGAGTGGC	90
PBH_0301196	GCACGTGCGTGGACGGGC	91
PBH_0301197	GCCGTGCGTGGAGTGGC	92
PBH_0301198	GGCGAGTGCCTGGACGGGC	93
PBH_0301199	AGACACGGAAAGTGAAGGCC	94
HLA_Bprobe		
PBH_0302001(positive)	TGGCCCTGACCGAGACCTGGGC	95
PBH_0302001a	CTACAACCAAGAGCGAGGCCG	96
PBH_0302002 (negative)	GCCTTGACCCAGACCTGGG	97
PBH_0302003	CCCGAACCCCTCCTCCTGC	98
PBH_0302004	CCCGAACCGTCTCCTGC	99
PBH_0302005	TGCTCTCGGCGGCCCTG	100
PBH_0302006	TGCTCTCGGGAGCCCTGG	101
PBH_0302007	GGGGGGCAGTGGCCCT	102
PBH_0302008	TGAGGTATTTGACACCGCCA	103
PBH_0302009	TGAGGTATTTCTACACCGCCATG	104
PBH_0302010	TTTCCACACCTCCGTGTCCC	105
PBH_0302011	TCTACACCGCATGTCCC	106
PBH_0302012	TCTACACCTCCGTGTCCC	107
PBH_0302013	CCGCTTCATCTCAGTGGGTAC	108
PBH_0302014	CGCTTCATCACCGTGGGCT	109
PBH_0302015	CGCTTCATCGCAGTGGCT	110
PBH_0302016	TACGTGGACGGCACCCAGTT	111
PBH_0302017	CGTGGACGACACCCAGTTCG	112
PBH_0302018	GGACGACACGCTGTTCGTGA	113
PBH_0302019	TGGACGACACGCAGTTCGTG	114
PBH_0302020	GCGACGCCACGAGTCCG	115
PBH_0302021	GCGACGCCGCGAGTCC	116
PBH_0302022	GAGTCCGAGAGAGGAGCCGC	117
PBH_0302023	CCGAGGAAGGAGCCGCG	118
PBH_0302024	AGGATGGCGCCCGG	119
PBH_0302025	GGACGGAGCCCCGGC	120
PBH_0302026	CGGGCGCGTGGATAGAG	121

PBH_0302027	CGGGCGCCATGGATAGAG	122
PBH_0302028	GGGGCCGGAATATTGGGAC	123
PBH_0302029	GGGGCCGGAGTATTGGGAC	124
PBH_0302030	GGGACCGGGAGACACAGATCT	125
PBH_0302031	TGGGACCGGAACACACAGATC	126
PBH_0302032	ACACAGAAGTACAAGCGCCAGG	127
PBH_0302033	ACACGGAACTGAAGGCCTCC	128
PBH_0302034	CACACAGATCTTCAAGACCAACAC	129
PBH_0302035	ATCTGCAAGGCCAAGGCACA	130
PBH_0302036	TACAAGGCCCAGGCACAGACT	131
PBH_0302037	ACACAGACTGACCGAGAG	132
PBH_0302038	CACACAGACTTACCGAGAGAGCC	133
PBH_0302039	GCACCGCGCTCCGCTA	134
PBH_0302040	CGGACCTGCTCCGCTACT	135
PBH_0302041	ACCTGCGGATCGCGCTC	136
PBH_0302042	CGGAACCTGCGCGGCT	137
PBH_0302043	CGGGTCTCACATCATCCAGAGG	138
PBH_0302044	GGGTCTCACACCTCCAGAGG	139
PBH_0302045	TCACACTTGGCAGACGATGTATG	140
PBH_0302046	ACACCTTCCAGAGGATGTACGG	141
PBH_0302047	CGACCTGGGGCCCGAC	142
PBH_0302048	CGACGTGGGGCCCGAC	143
PBH_0302049	GGGTACCACAGGACGCCT	144
PBH_0302050	CGGGTATGACCAGGACGCC	145
PBH_0302051	GGGCATGACCAGTCCGCC	146
PBH_0302052	GCGGGTATAACCAAGTTCGCC	147
PBH_0302053	GAGGACCTGCGCTCCTGGA	148
PBH_0302054	GAGGACCTGAGCTCCTGGA	149
PBH_0302055	GGACCGCCGCGGACAC	150
PBH_0302056	GGACCGCGGCGGACAC	151
PBH_0302057	CGGACACGGCGGCTCAG	152
PBH_0302058	CGGACACCGCGGCTCAG	153
PBH_0302059	GGCCCGTGAGGCGGAG	154
PBH_0302060	GGCCCGTGTGGCGGAG	155
PBH_0302061	GCGGAGCAGGACAGAGCCTA	156
PBH_0302062	GCGGAGCAGTGGAGAGCCTA	157
PBH_0302063	GCGGAGCAGCTGAGAGCCTA	158
PBH_0302064	AGCAGCTGAGAACCTACCTGGAG	159
PBH_0302065	AGCAGCTGAGAGCCTACCTGGAG	160
PBH_0302066	GGAGGGCGAGTGCCTGG	161
PBH_0302067	GGAGGGCACGTGCGTGG	162
PBH_0302068	GGAGGGCCTGTGCGTGG	163
PBH_0302069	CGTGGAGTTCGCTCCGCAG	164

PBH_0302070	CGTGGAGTGGCTCCGCAG	165
PBH_0302071	CTCCGCAGACACCTGGAGAAC	166
PBH_0302072	GCTCCGCAGATACCTGGAGAA	167
PBH_0302073	AGGACAAGCTGGAGCGCG	168
PBH_0302074	GGACACGCTGGAGCGC	169
PBH_0302075	GGAGACGCTGCAGCGCG	170
HLA_DRB1probe		
PBH_0303001	CTTGTGGCAGCTTAAGTTTGAATGT	171
PBH_0303002	TGGAGTACTCTACGTCTGAGTGTCA	172
PBH_0303003	GGAGCAGGTTAAACATGAGTGT	173
PBH_0303004	CCTGTGGCAGGGTAAGTATAAGT	174
PBH_0303005	TTGGAGTACTCTACGGGTGAGTG	175
PBH_0303006	CCTGTGGCAGCTAAGAGGG	176
PBH_0303007	CCTGGAGCAGGCGCGG	177
PBH_0303008	CCTGGAAGACGAGCGGGC	178
PBH_0303009	CCAGGAGGAGAACGTGCGC	179
PBH_0303010	CCTGGAAGACAGGCGGGC	180
PBH_0303011	CGGTTGCTGGAAGATGCATC	181
PBH_0303012	CGGTTCTCTGGACAGATACTTCTATCAC	182
PBH_0303013	TGCAGTTCTCTGGAAAGACTCTTCT	183
PBH_0303014	CGGTATCTGCACAGAGGCATCT	184
PBH_0303015	TGCTGGAAAGACGCGTCCA	185
PBH_0303016	CGGTTACTGGAGAGACACTTCCATA	186
PBH_0303017	CGGCCCTGATGAGGAGTACTGG	187
PBH_0303018	CCTGTCGCCGAGTCTTGA	188
PBH_0303019	GGCCTGATGCCGAGTACTGG	189
PBH_0303020	CAGGAGGAGCTCTGCGCTT	190
PBH_0303021	GAGCAGAAGCGGGGCCG	191
PBH_0303022	TCCTGGAGCGGAGGCGG	192
PBH_0303023	GCGGGCCCTGGTGACA	193
PBH_0303024	GGGGGAGTTCCGGGCGG	194
PBH_0303025	GGGGGAGTACCGGGCGG	195
PBH_0303026	GGCCTGACGCTGAGTACTGG	196
PBH_0303027	CAATGGGACGGAGCGGGTGC	197
PBH_0303027a	AATGGGACGGAGCGGGTG	198
PBH_0303027b	GGGACGGAGCGGGT	199
PBH_0303028	GGGGGAGTTCCGGGCG	200
PBH_0303029	TGGGGGAGTACCGGGCG	201

PBH_0303030	ACCAAGAGGAGTACGTGCGCTT	202
PBH_0303031	GCCTGCTGCGGAGCACTG	203
PBH_0303032	CCAGGAGGAGTTCTGTCGC	204
PBH_0303033	CCTGGAAGACGAGCGGGC	205
PBH_0303034	GCCTGCTGCGGAGCACTG	206
PBH_0303035	GGCCTGATGCCGAGTACTGG	207
PBH_0303036	CCAGGAGGAGAACGTGCGC	208
PBH_0303037	CCTGGAAGACGAGCGGGC	209
PBH_0303038	GACAGGCGCGCCGCG	210
PBH_0303039	CTGGAGCAGAGGCGGGC	211
PBH_0303040	AACCAAGAGGAGTACGTGCGC	212
PBH_0303041	AATGGGACGCAGCGG[[G]]BT	213
PBH_0303055	CATCCTGGAAGACGAGCGGG	214

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